*The Journal of Academic Social Science Studies*

JASSS

*International Journal of Social Science*
***Doi number:http://dx.doi.org/10.9761/JASSS2425***
Number: 29 , p. 261-270, Autumn III 2014

# ANALYZING EFFECT OF AGE AND SEX DIFFERENCES ON PROSOCIAL BEHAVIOR OF PRESCHOOL CHILDREN

*YAŞ VE CİNSİYETİN OKUL ÖNCESİ ÇOCUKLARIN OLUMLU SOSYAL DAVRANIŞLARI ÜZERİNDEKİ ETKİLERİNİN ANALİZİ*

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**Abstract**

In this study, it is aimed to evaluate preschool children's prosocial behaviors according to teachers' views. The sample group of this study comprised of 116, 5-6 year old children (girls= 53, boys= 63). Participants were recruited from eight classrooms in six early childhood centers located in the Uşak city center. A Demographic Information Form and Prosocial Behavior Scale-Teacher Form were used to collect the data. The Mann-Whitney U test is used for the statistical analysis. As a result of the study, gender statistically has a significant effect on prosocial behaviors. Also, children's prosocial behaviors did not differ in significance level in terms of statistics according to age variable.

**Key Words:** Prosocial Behaviors, Age, Gender, Preschool Children

**Özet**

Bu çalışmada, öğretmen görüşlerine göre okul öncesi çocukların olumlu sosyal davranışlarını değerlendirmek amaçlanmıştır. Araştırmanın örneklemini, Uşak ili merkezinde okul öncesi eğitim almaya devam eden 116 (53 kız, 63 erkek) çocuk oluşturmaktadır. Katılımcılar, Uşak şehir merkezinde yer alan altı okuldaki sekiz sınıftan seçilmiştir. Araştırmada veri toplama araçları olarak "Kişisel Bilgi Formu" ve "Olumlu Sosyal Davranış Değerlendirme Ölçeği-Öğretmen Formu" kullanılmıştır. İstatistiksel analizler için Mann-Whitney U testi kullanılmıştır. Araştırma sonucunda yaş değişkeninin çocukların prososyal davranış puanlarında anlamlı bir farklılığa yol açmadığı, ancak cinsiyet açısından prososyal davranış puanlarında istatistiksel açıdan anlamlı bir farklılığa neden olduğu belirlenmiştir.

**Anahtar Kelimeler:** Olumlu Sosyal Davranış, Yaş, Cinsiyet, Okul Öncesi Çocuk

## INTRODUCTION

The individual needs other people to sustain his life and strives a life time to get a foothold in the society, thus to socialize. Socialization is a process that continues a life time (Kim and Stevens 1987). Living together and in harmony in a certain society is dependent on to what extent the prosocial behaviors are at the forefront in that society (Bee and Boyd 2004; San Bayhan and Artan 2007; Uzmen 2002).

Prosocial behaviors are social behaviors that the individual exhibits voluntarily and without any pressure and which benefit a certain individual or a group of people (Baron, Byrne and Branscombe 2006; Eisenberg and Mussen 1989; Eisenberg et al. 2002; Eisenberg, Fabes, and Spinrad 2006). In other words, prosocial behavior stands for voluntarily manifested behaviors (Feldman 2005; Miller, Bernzweig, Eisenberg and Fabes 1991; Persson 2005). Prosocial behaviors include empathy, sympathy, compassion, care, consoling, helping, sharing, co-operating, willingness and donating (Hastings, Utendale and Sullivan 2006; Trommsdorff, Friedlmeier and Mayer 2007). Also, prosocial behavior is linked to emotional regulation (Eisenberg et al., 1995), social competence (Chen, Li, Li, & Liu, 2000; Eisenberg et al., 1996), and moral reasoning (Miller, Eisenberg, Fabes, & Shell, 1996).

Prosocial behaviors are developed in the first years of the individual's life span and are subject to development a life time (Ladd and Profilet 1996). According to Eisenberg et al. (1996), prosocialization is a natural part of a child's behavior. For instance, infants start to collaborate, share, cooperate and respond to other people's emotions through empathy between 18-24 months (San-Bayhan and Artan 2007; Vaish, Carpenter, and Tomasello 2009). Understanding other people's feelings affects children's social skills in a positive way, thus improves the skills that are necessary to establish and sustain prosocial relations during school years and a lifetime (Garner-Waajid 2012). Studies have shown that children who are better at understanding and recognizing emotions exhibit a much higher level of prosocial behaviors and are more popular among their peers (Cassidy et al. 2003; Garner-Waajid 2012). There is an increase in the amount of prosocial behaviors during preschool period (Eisenberg and Fabes 1998; Monks, Ruiz and Val 2002; Pratt, Skoe and Arnold 2004). One of the important outcomes of early childhood years is to learn positive and socially acceptable ways for interaction with others (Walker 2004). There are many ways to achieve this goal; prosocial behaviors such as helping, sharing, consoling, informing and collaborating are among these means (Brownell, Svetlova, and Nichols 2009; Dunfield et al. 2011; Svetlova, Nichols, and Brownell 2010; Zahn-Waxler, Radke-Yarrow, Wagner, and Chapman 1992).

Just like other social behaviors, prosocial behaviors are shaped by parents, friends, teachers, the society and the culture (Hastings, Utendale and Sullivan 2006). The factors that affect the development of these behaviors include parenting styles, gender, age and cultural expectations (Diener and Kim 2004; Fabes, Martin, and Hanish 2003; Feldman 2005). Gender is one of the most consistent correlates of prosocial behavior. As far as gender factor is considered, it is common view that

females are more "prosocial" than males. Eisenberg and Mussen (1989) suggest that females exhibit prosocial behaviors more often than males do. In his study which examined the frequency of exhibiting prosocial behaviors by gender, Worden (2002) formed his population with 407 preschool children. Result of the study showed that while female students exhibited prosocial behaviors more often than male students; the aggressiveness scores of male students were higher than female students'. Studies in the literature that examined the existence of any relation between age and prosocial behaviors revealed different results. In a longitudinal study by Seven (2010), prosocial behavior scores at 6 and 7 ages were found close to each other. While some children exhibit these at a rather early age, some children exhibit these behaviors at an older age. There are studies suggesting that the frequency and level of maturity of exhibiting prosocial behaviors in preschool period increase in parallel with age (Eisenberg, Fabes ve Spinrad, 2006). However, in their study McGinley and Carlo (2007) found that there is no relation between age and prosocial behaviors.

Even though studies have been carried out on the positive outcomes of prosocial behaviors (Dodge, Pettit and Bates 1994; Van der Mark, Van Ijzendoorn and Bakermans-Kranenburg 2002), few studies have been carried out on the factors that contribute to the development of these behaviors. During the literature review, no studies have been found on the examination of Turkish preschool children's prosocial behaviors by gender and age. The present study will contribute to the literature in this respect since it is the first study that has been carried out in this regard. Therefore, the aim of this study is to examine the effect of age and gender on the prosocial behaviors of preschool children.

## METHOD

### Model

This study was used relational survey model.

### Participants

The research was carried out through the data gathered from 53 (46%) female and 63 (54%) male preschool education children. Participants were recruited from eight classrooms in six early childhood centers located in the Uşak city center. Participants were healthy, typically developing children. The sample group has been chosen by simple random sampling method. In the simple random sampling method, we made a list of preschool classes reporting to infant schools and primary schools in Uşak Province under the Ministry of Education and drew tickets, thus chose 6 schools.

### Data Collection and Analysis

Demographic information form; this form was developed by the researcher. The form included questions regarding the children's demographic characteristics such as child's gender, date of birth, school name.

Teacher Rating of Prosocial Behavior Scale: It has been created by merging Iannotti's (1985) 13-item scale and Wilby's (2003) 6-item scale in order to measure preschool children's positive social behaviors. This scale consists of 19 items in total

and is a Likert-type scale which is assessed with 1 (never) and 7 (always). Getting a high score from the scale indicates a high level of positive social behavior among children. The validity and reliability of the scale was studied by Yağmurlu et al. (2005) on Turkish participants living in Australia. The internal consistency coefficient of the scale was found .85 for "spontaneous" helping, .86 for "spontaneous" sharing, .91 for "spontaneous" consoling and .80 for "spontaneous" collaborating; and .83 for helping "when the teacher asks so", .81 for sharing "when the teacher asks so", .92 for consoling "when the teacher asks so", and .75 for collaborating "when the teacher asks so". The teacher assesses the level of a certain prosocial behavior twice considering the frequency of exhibiting a certain prosocial behavior "spontaneously" and the frequency of exhibiting the same "when the teacher asks so". Of the 19 items, 4 of them cover cooperating (eg. Does the tidying up), 6 of them cover sharing (eg. Gives the toy he/she is playing with at the moment to another kid), 5 of them cover consoling (eg. Says something to console an upset child or adult) and 4 of them cover collaborating (eg. Collaborates with another child or with you).

**Procedure**

The Demographic Information Form and the Teacher Rating of Prosocial Behavior Scale were filled out by the children's' teachers. The selected schools were visited in order to inform teachers about the study and measurement tools. After receiving the consent of Uşak National Education Directorate, we provided the relevant scales in envelopes to the teachers of the children under the scope of the present study. Each envelope also included the instructions on how to fill in the scales, personal information form and the Teacher Rating of Prosocial Behavior Scale. After filling in the scales, teachers delivered the sealed envelopes to people in charge in the relevant preschool institutions. Participating teachers completed the Teacher Rating of Prosocial Behavior Scale and Demographic Information Form for each participating child. The teachers had known the children for at least six months prior to the study.

The data were analyzed using the SPSS 20 software. When the normality test results were evaluated, Kolmogorov-Smirnov Test was used. A probability $p$ value of less than .05 was considered statistically significant. The results of the normality test indicated that the distributions were not normal. Therefore, non-parametric tests were applied. Comparisons were conducted using non-parametric tests: Mann-Whitney *U*-test for two independent groups.

## RESULTS

**Table 1. Mann Whitney U-Test results regarding the scores that children who participated in the research received from the Teacher Rating of Prosocial Behavior Scale by their gender**

| Gender | N | Mean Rank | Sum of Ranks | U | p |
|---|---|---|---|---|---|
| Girls | 53 | 65.72 | 3483.00 | 1287.00 | .03 |
| Boys | 63 | 52.43 | 3303.00 | | |
| Total | 116 | | | | |

The non-parametric Mann Whitney U-test was carried out in order to determine whether the Prosocial Behavior Scale scores of the children (teacher's assessment) showed a significant difference by gender and the result of the test revealed a statistically significant difference in favor of females among the groups (U=1287,00, p<.05). As seen in the average points, the level of prosocial behaviors among girls ($\overline{X}$=65,72) is higher compared to boys ($\overline{X}$ = 52,43).

**Table 2. Mann Whitney U-Test results regarding the scores that children who participated in the research received from the Teacher Rating of Prosocial Behavior Scale by their age**

| Age | N | Mean Rank | Sum of Ranks | U | p |
|---|---|---|---|---|---|
| 5 years | 67 | 60.21 | 4034.00 | 1527.00 | .52 |
| 6 years | 49 | 56.16 | 2752.00 | | |
| Total | 116 | | | | |

Table 2 indicates that, in the Mann-Whitney U test, the Prosocial Behavior Scale scores of the children (teacher's assessment) did not show a significant difference by gender (U=1527,00, p>.05). When the mean rank is taken into account, it is understood that total scores of 5-year-old children are higher, which suggests that children in this age bracket are more successful in exhibiting prosocial behaviors such as helping and collaborating according to teacher's assessment.

**DISCUSSION**

The aim of this study is to examine the prosocial behaviors of preschool children by age and gender. The result of the study revealed that age as a variable did not cause a significant difference in the prosocial behavior scores of the children, whereas gender caused a statistically significant difference in the prosocial behavior scores.

A statistically significant difference was found between the prosocial behavior levels of children with relation to gender. In regard to gender differences, preschool teachers rated girls as more prosocial than boys. Accordingly, the prosocial behavior point averages of girls were higher than those of boys. This finding is also supported by previously conducted research. For instance, in their study which examined the effect of gender on the helping behavior of preschool children, King and Barnett (1980) found that girls responded to a need for help faster than boys did. In his study Staub (1971) examined the helping and sharing behaviors of preschool children and underlined that the positive outcomes of helping and sharing should be emphasized on preschool children. It was found that, compared to the control group of the same gender, girls tried to help more, whereas boys were more prone to sharing. In a study

by Zahn-Waxler, Cole, Welsh and Fox (1995), 82 children at the ages of 4 and 5 were studied and it was determined that girls exhibited prosocial behaviors more than boys did. Similarly, Carlo and Randall (2002) determined that female students were more prone to exhibiting prosocial behaviors, establishing empathy and creating more point of views. Bierhoff (2002) says that studies have shown that girls exhibit prosocial behaviors such as helping, collaborating, sharing and empathy more than boys do. Peren, Stadelmann, Wyl and Klitzing (2007) studied the prosocial behaviors of preschool children. In their study that covered 1060 people including parents, teachers and children, they found that boys were more active than girls and exhibited a lower level of prosocial behaviors. In a study by Altay and Güre (2012), when the prosocial behaviors reported by teachers were examined in terms of differences by gender, it was found that girls exhibited behaviors such as collaborating with peers, sharing their belongings with them and consoling them when necessary more often than boys. In the same study it was also reported by the teachers that girls were more affectionate to their peers and more willing to help them than boys were. Yoleri and Sevinç (2014) study investigated the influences of gender and child temperament on the development of social skills. As a result of the study, boys were found to display lower social skills than girls.

No statistically significant difference was found between the children's prosocial behavior levels in terms of the child's age. However, when mean ranks are taken into account, it is understood that total scores of 5-year-old children are higher. When we consider the developmental differences of this age bracket, younger children are expected to have lower prosocial behavior scores. These results contradict with the results of other studies. In a study by Diener and Kim (2004), it was found that, according to teacher’s assessment, there is a relation between age and the prosocial behaviors and it is in favor of elder children. In another study on two age brackets (the first including participants aged between 3.0 years and 4.4 years, and the second including participants aged between 4.5 years and 5.2 years), no significant difference was found between prosocial behavior scores of younger and elder children (Swit & McMaugh, 2012). In the longitudinal study by Seven (2010), it has been found that the scores of the same group have shown no difference at 6 and 7 ages.

The most important reason for the differences between genders is thought to be related to the gender roles that the children undertake at early ages. Eisenberg and Mussen (1989) suggest that girls exhibit prosocial behaviors more often than boys do. In many cultures, female children are expected to be more helpful, more sharing, to console those who are having difficult times and to take responsibility. Moreover, in many cultures, girls are awarded more when they manifest these behaviors.

There are some limitations to this study. For instance, the teacher is the only source of information in the assessment of preschool children’s prosocial behaviors, and this is a limitation to the present study. It is considered crucial to receive information from different sources such as parents and peers in future studies.

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